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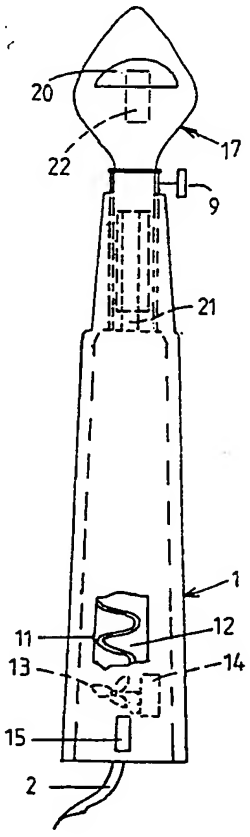
(54) Title: MASSAGING DEVICE

(57) Abstract

A massaging device comprising a handle (1) with an elongated shape and with a massaging section (8, 17) being releasably connected to said handle. Said massaging section (8, 17) can be directly heated by a heating element (4, 11) provided in the handle or by means of air flowing through a channel (12) provided in the handle (1) through which channel air is passed by means of a fan (13) and along the heating device (11) present in the handle, said air being supplied to the massaging section (8, 17) to heat this portion. Further magnetic means (22) are present in the massaging section (8, 17) for generating a magnetic field around it. Further a metering device can be present for a dosed supply of salve, cream or such like to the massaging section.



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Massaging device.

The invention relates to a massaging device comprising a handle and a massaging section.

In case of known massaging techniques, pain relieving salve, moist instilling creams, anti-wrinkle creams or such like products are rubbed into the skin. It has appeared, however, that in this way the salve or cream does not penetrate beyond the upper layer of the skin and the moisture that was introduced into the skin will soon disappear again.

So the effect of the known massaging devices is rather superficial and they are only suitable for very defined purposes.

Now it was found that this is substantially caused by an insufficient blood circulation in the body tissues as a result of which nutrients are supplied in insufficient quantity and muscles, glands etc. do not function properly.

Now the object of the invention is to provide a massaging device having a more profound effect and also being suitable for treating infections, pains and open wounds.

According to the invention this is obtained by the fact that either near or in the massaging section means are provided for heating said massaging section and for generating a magnetic field around it.

By means of heating the muscles and the skin can be rendered flexible, leading to the opening of the pores to the greatest possible extent, enabling the applied cream and salve to penetrate both more rapidly and more profoundly into the body.

By generating a magnetic field around the massaging section the effect of the heating and the profound working of the massaging device is enhanced.

It has appeared that by this the blood circulation in the tissues and thereby supply of nutrients to the tissues is improved. Further the removal of waste products is facilitated and infections, viruses and such like can be better fought.

Open wounds can also be treated with the device according to the invention because no direct contact is necessary between the device and the skin. By heating the skin, blood

coming out of the wound will solidify and the wound will be covered by a scab, so that the wound will heal faster and the possibility of infections will be reduced.

It has appeared that the effect of the north pole of the magnetic field differs from that of the south pole. The north pole can be effectively used for fighting inflammations, infections, viruses and such like and the south pole can be effectively used for fighting chronic pains and such like.

The treatment with the magnetic field may well be used in conjunction with treatment by heating, infra-red rays, sound waves, vibrations, laser beams and other techniques used for these purposes.

According to the invention, the massaging device is in particular characterized by the fact that the handle has an elongated shape, a heating element being positioned in this for heating the massaging section.

By this the massaging section can be small if this is desirable for the treatment of certain places of the body such as wrinkles in the face, crow's feet etc.

The massaging section can be directly heated by the heating element, but it is also possible that at least one channel is provided in the handle, through which channel air is passed by means of a fan and along the heating element present in the handle, said air being supplied to the massaging section to heat this portion by means of said air.

With this the massaging section can be executed with a hollow section and can be provided with an air inlet opening connected to the channel in the handle and with an air outlet opening positioned at distance from the handle so that a flow of heated air can pass through the massaging section at least partially.

In particular there will also be means for controlling the temperature of the heating element and/or for controlling the amount of air flowing along the heating element.

The magnetic field can be generated both by a permanent magnet and an electromagnet. In the latter case the field can be interrupted by means of a switch provided in the handle.

According to an embodiment of the invention the handle can be provided with means for connecting a container for salve, cream of such like products thereto and with a channel for supplying said product to the massaging section.

In that case it is not necessary to supply the salve, cream or such like to the skin by hand.

Further, a metering device can be present for a dosed supply of the salve, cream or such like to the massaging section.

In particular the massaging section could be a blade and have the shape of a spoon. The convex part of this can possibly be partly furnished with a bumpy surface for an even better treatment of the muscles. By this, a uniform distribution of the accumulated tallow fats is promoted as well.

The massaging section can be executed such that it can be releasably connected to the handle. Then, the massaging section can be adapted to the use as the need occurs.

Now the invention will be described more in detail by reference to the accompanying drawings, in which:

Fig. 1 schematically shows a first embodiment, partly in plan view and partly in sectional view, of a massaging device according to the invention in which the massaging section is heated electrically;

Fig. 2 schematically shows a second embodiment, partly in plan view and partly in sectional view, of a massaging device according to the invention in which the massaging section is heated by means of air;

Fig. 3 and 4 show a plan view and a side view resp. of the massaging section of the device shown in fig. 2;

Fig. 5 shows a side view of a massaging section with a partially rough surface and provided with a permanent magnet; and

Fig. 6 shows a plan view of a massaging section in which there is space for inserting an infra-red radiator, vibrating device or the like, possibly in combination with a permanent magnet or electromagnet.

Fig. 1 shows a massaging device comprising a handle 1 with a current supply wire 2 for supplying current to an

adjustable current regulator 3 and from there to a heating element 4, e.g. in the shape of a spiral, and with a fine-tuning button 5 for the current regulator 3. In the heating element 4 an opening 6 is provided in which the shaft 7 of a massaging section 8 can be inserted. The shaft 7 can be fixed by means of a set screw 9. Thus the massaging section 8 can be replaced by another one as the need occurs. Around the heating cell 4 an isolating covering 10 is provided.

In case of the embodiment shown in fig. 2 in the handle 1, a heating element 11 is provided within a channel 12 through which air can be passed by means of a fan 13 driven by a small motor 14. A switch 15 is present for supplying current from the supply wire 2 to the heating element 11 and to the motor 14 of the fan 13.

At the other end the channel 12 is shaped such that the shaft 16 of a massaging section 17 can be inserted therein. In the shaft 16, an opening 18 is present as appears in particular from the figures 3 and 4. The opening 18 is connected to an air passage 19 in the massaging section 17, said passage debouching into an opening 20 in the back side of said section. In this way, the massaging section 17 can be heated by means of the air flowing through the channels 12 and 19 towards the opening 20.

In the wall of the channel 12 opposite the shaft 16, a groove 21 is provided for passing the air from the channel 12 into the opening 18. By rotating the massaging section 17 in respect of the handle 1 the opening 18 can be brought more or less in overlapping relation with the groove 21 and by this, the amount of air flowing towards the massaging section 17 and out of the opening 20 can be regulated. After adjusting the massaging section 17 it can be fixed by means of the set screw 9.

As appears in particular from fig. 4, in the massaging section 17 a permanent magnet 22 is positioned. Instead of a permanent magnet, an electromagnet can also be used which can be energized by a current supply and a switch provided in the handle 1 in a way not further indicated.

It is also possible to use a metal massaging section which is previously magnetized. A disadvantage of doing so

is the fact that it will be demagnetized in the long run, in particular because the section is heated.

The massaging sections shown in the figures 5 and 6 each have a special shape for the purposes already mentioned above. By an corresponding execution of the shaft of said sections they can be made suitable to be received in the handle 1 of the embodiments shown in the figures 1 and 2.

C L A I M S

1. A massaging device comprising a handle (1) and a massaging section (8,17), characterized in that either near or in the massaging section (8,17) means (4,11,22) are provided for heating said massaging section and for generating a magnetic field around it.

2. A massaging device according to claim 1, characterized in that the handle (1) has an elongated shape, a heating element (4,11) being positioned in this for heating the massaging section (8,17).

3. A massaging device according to claim 2, characterized in that at least one channel (12) is provided in the handle (1), through which channel air is passed by means of a fan (13) and along the heating element (11) present in said handle (1), said air being supplied to the massaging section (17) to heat this.

4. A massaging device according to claim 3, characterized in that the massaging section (17) is executed with a hollow section and is provided with an air inlet opening (19) connected to the channel (12) in the handle (1) and with an air outlet opening (20) positioned at distance from the handle (1) so that a flow of heated air can pass through the massaging section (17) at least partially.

5. A massaging device according to one of the claims 2-4, characterized in that means (3,5;18,21) are present for controlling the temperature of the heating element (4,11) and/or for controlling the amount of air flowing along the heating element (11).

6. A massaging device according to one of the preceding claims, characterized in that the handle (1) is provided with means for connecting a container for salve, cream of such like products to it and with a channel for supplying said product to the massaging section (8,17).

7. Massaging device according to claim 6, characterized in that a metering device is present for a dosed supply of the salve, cream or such like to the massaging section (8,17).

8. Massaging device according to one of the preceding claims, characterized in that the massaging section is a blade and has the shape of a spoon.

9. Massaging device according to claim 8, characterized in that the convex part of the blade (8,17) is at least partly furnished with a bumpy surface.

10. Massaging device according to one of the preceding claims, characterized in that the massaging section (8,17) is releasably connected to the handle (1).

FIG. 1

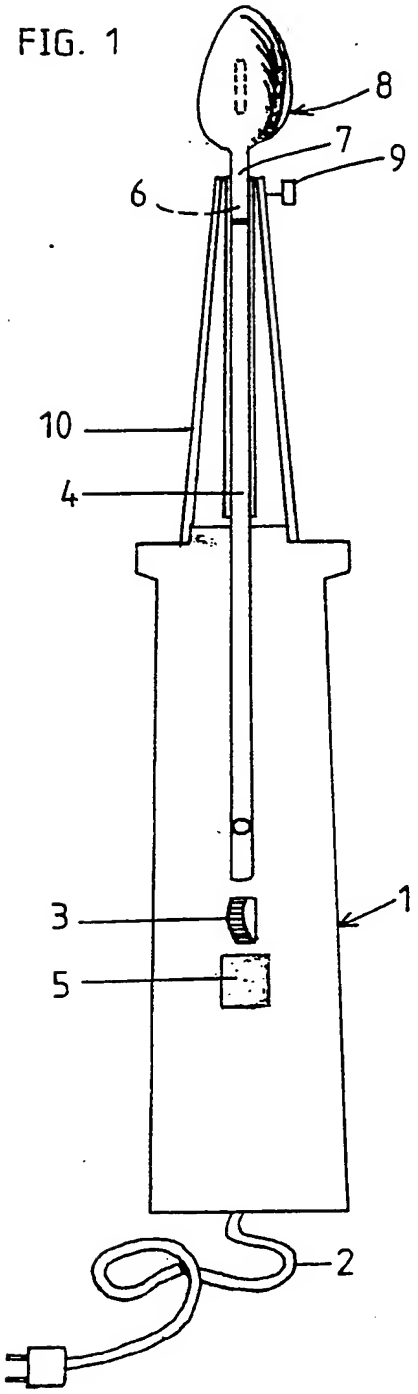


FIG. 2

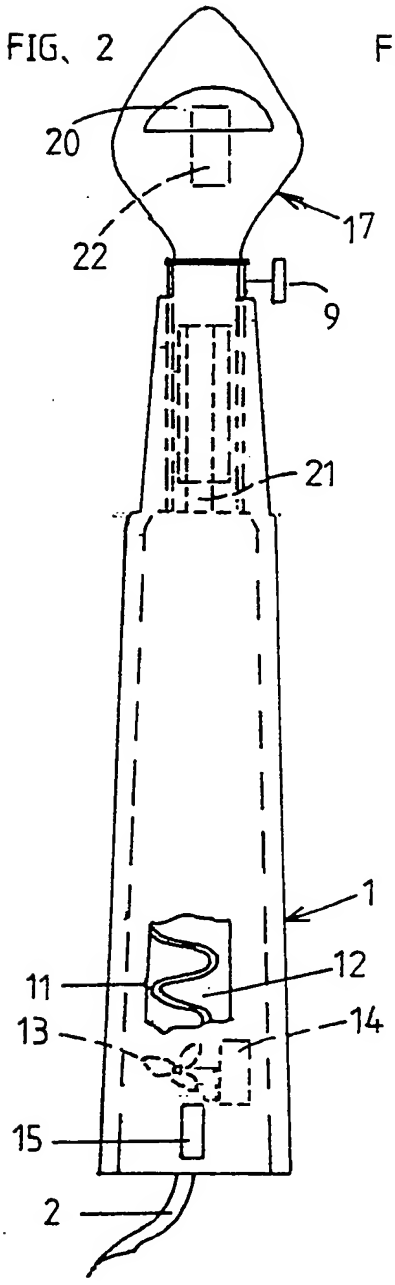


FIG. 3

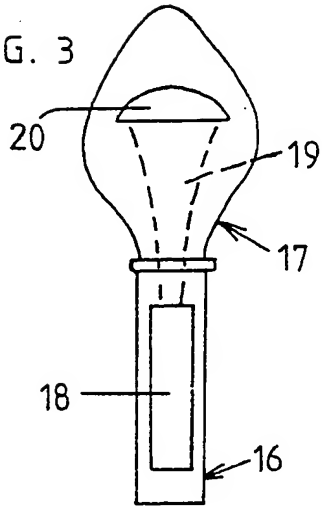


FIG. 4

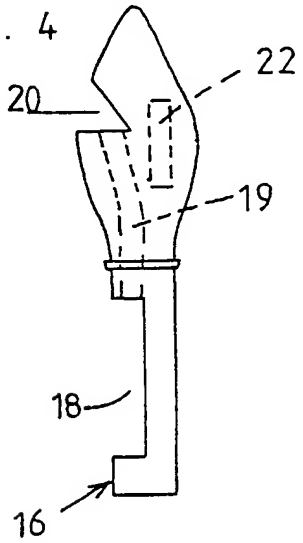


FIG. 5

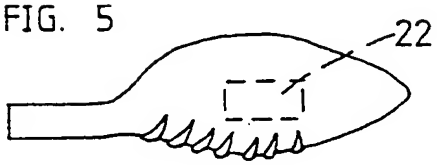
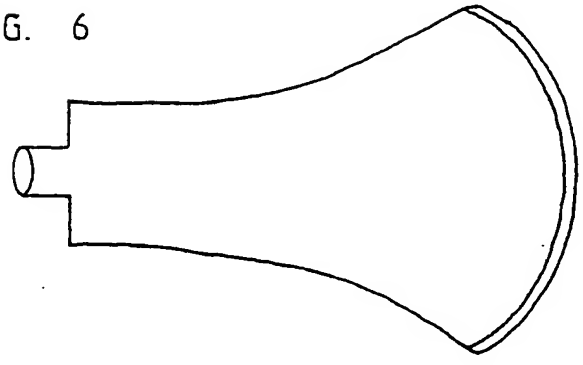


FIG. 6



INTERNATIONAL SEARCH REPORT

International Application No PCT/NL 92/00032

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all)[6]

According to International Patent Classification (IPC) or to both National Classification and IPC

Int.Cl. 5 A61H7/00; A61N2/08

II. FIELDS SEARCHED

Minimum Documentation Searched[7]

Classification System	Classification Symbols
Int.Cl. 5	A61H

Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched[8]

III. DOCUMENTS CONSIDERED TO BE RELEVANT[9]

Category °	Citation of Document, [11] with indication, where appropriate, of the relevant passages [12]	Relevant to Claim No.[13]
X Y	US,A,4 691 693 (SATO) 8 September 1987 see column 1, line 48 - line 53; figures see column 2, line 23 - line 57	1,2,5,10 3,4,6-9
Y	WO,A,8 604 809 (RUDERIAN) 28 August 1986 see page 9, last paragraph - page 10, paragraph 1; figures 4,23-25 see page 14, line 2 - line 5 see page 19, paragraph 2 see page 20, paragraph 3	3,4,6,7
Y	WO,A,8 603 664 (ROTH) 3 July 1986 see page 12, last paragraph - page 13, paragraph 1; figures 1,2	7
Y	FR,A,2 341 285 (SCRATCHER S.A.) 16 September 1977 see claim 1; figures 1,2	8,9

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X	US,A,4 082 089 (MORIYAMA ET AL.) 4 April 1978 see column 2, line 32 - line 49; figure 4	1,2,5
X	FR,A,2 592 579 (GROSS) 10 July 1987 see claims; figures	1,2,5
X	US,A,2 795 224 (BRANDENBURG) 11 June 1957 see column 1, line 32 - line 35; claim; figures	1
X	SOVIET PATENTS ABSTRACTS Section PQ, Week 8818, 5 May 1988 Derwent Publications Ltd., London, GB; Class P33, AN 88-125035/18 & SU,A,1 342 501 (GLAVMOSPROMSTROIMAT) 7 October 1987 see abstract	1

ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL PATENT APPLICATION NO. NL 9200032 SA 57235

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US-A-2795224		None		